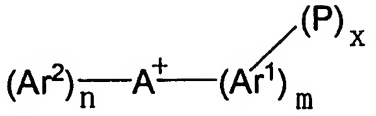
Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) An onium salt compound having a cation moiety of the following formula (1),



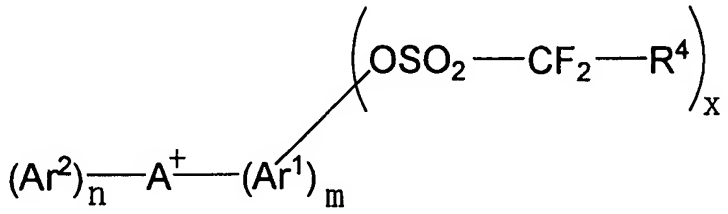
(1)

wherein A represents an iodine atom or a sulfur atom, when A is an iodine atom, m is 1 or 2 and n is 0 or 1, provided that (m+n)=2, and x is an integer of 1-10, and when A is a sulfur atom, m is 1-3 and n is 0-2, provided that (m+n) = 3, and x is an integer of 1-15; Ar^1 represents a substituted or unsubstituted aromatic hydrocarbon group having 6-20 carbon atoms with a valence of 1 to (x+1) or a substituted or unsubstituted heterocyclic group having 3-20 atoms with a valence of 1 to (x+1), Ar^2 represents a substituted or unsubstituted monovalent aromatic hydrocarbon group having 6-20 carbon atoms or a substituted or unsubstituted monovalent heterocyclic group having 3-20 atoms, or Ar^1 and Ar^2 mutually bond together with A^+ in the formula to form a group possessing a cyclic structure with 3-8 atoms; and the x-number of P groups bonding to one or more of the m-number of Ar^1 groups individually represent $-O-SO_2R^1$, $-O-S(O)R^2$, or $-SO_2R^3$, wherein R^1[[,]] and R^2~~, and R^3~~ individually represent a hydrogen atom, a substituted or

unsubstituted alkyl group having 1-20 carbon atoms, a substituted or unsubstituted monovalent alicyclic hydrocarbon group having 3-20 carbon atoms, an alkenyl group having 2-20 carbon atoms, a substituted or unsubstituted monovalent aromatic hydrocarbon group having 6-20 carbon atoms, or a substituted or unsubstituted monovalent heterocyclic group having 3-20 atoms, or a group $-N(R')_2$, wherein R' individually represents a hydrogen atom, a substituted or unsubstituted alkyl group having 1-20 carbon atoms, a substituted or unsubstituted monovalent alicyclic hydrocarbon group having 3-20 carbon atoms, an alkenyl group having 2-20 carbon atoms, a substituted or unsubstituted monovalent aromatic hydrocarbon group having 6-20 carbon atoms, or a substituted or unsubstituted monovalent heterocyclic group having 3-20 atoms, or two R' groups form, in combination and together with the nitrogen atom in the formula, a group having a cyclic structure with 3-8 atoms and wherein R^3 represents a hydrogen atom, a substituted or unsubstituted alkyl group having 1-20 carbon atoms, a substituted or unsubstituted monovalent alicyclic hydrocarbon group having 3-20 carbon atoms, an alkenyl group having 2-20 carbon atoms, or a substituted or unsubstituted monovalent heterocyclic group having 3-20 atoms, or a group $-N(R')_2$, wherein R' individually represents a hydrogen atom, a substituted or unsubstituted alkyl group having 1-20 carbon atoms, a substituted or unsubstituted monovalent alicyclic hydrocarbon group having 3-20 carbon atoms, an alkenyl group having 2-20 carbon atoms, a substituted or unsubstituted monovalent aromatic hydrocarbon group having 6-20 carbon atoms, or a substituted or unsubstituted monovalent heterocyclic group having 3-20 atoms, or two R' groups form, in combination and together with the nitrogen atom in the formula, a group having a cyclic structure with 3-8 atoms.

2. (Original) The onium salt compound according to claim 1, wherein A in formula (1) is a sulfur atom.

3. (Currently Amended) [[The]] An onium salt compound ~~according to claim 1, wherein P in formula (1) is $O\text{-}SO_2\text{-}CF_2\text{-}R^4$ and the~~ having a cationic moiety ~~has the in~~ of the following formula (2),



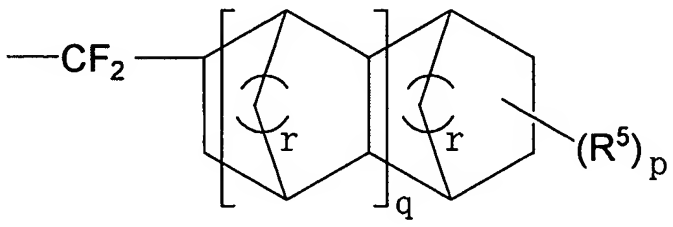
(2)

wherein ~~A, Ar^1, m, Ar^2, n, and x are respectively the same as A, Ar^1, m, Ar^2, n, and x in the formula (1)~~ A represents an iodine atom or a sulfur atom, when A is an iodine atom, m is 1 or 2 and n is 0 or 1, provided that (m+n)=2, and x is an integer of 1-10, and when A is a sulfur atom, m is 1-3 and n is 0-2, provided that (m+n) = 3, and x is an integer of 1-15; Ar^1 represents a substituted or unsubstituted aromatic hydrocarbon group having 6-20 carbon atoms with a valence of 1 to (x+1) or a substituted or unsubstituted heterocyclic group having 3-20 atoms with a valence of 1 to (x+1), Ar^2 represents a substituted or unsubstituted monovalent aromatic hydrocarbon group having 6-20 carbon atoms or a substituted or unsubstituted monovalent heterocyclic group having 3-20 atoms, or Ar^1 and Ar^2 mutually bond together with A^+ in the formula to form a group possessing a cyclic structure with 3-8 atoms and R^4 represents a hydrogen atom, fluorine

atom, nitro group, cyano group, or a monovalent organic group having 1-20 carbon atoms.

4. (Original) The onium salt compound according to claim 3, wherein A in formula (2) is a sulfur atom.

5. (Original) The onium salt compound according to claim 3, wherein R^4 in the formula (2) is a group of the following formula (3),



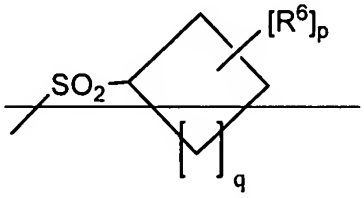
(3)

wherein R^5 represents a substituted or unsubstituted alkyl group having 1-20 carbon atoms, a substituted or unsubstituted monovalent alicyclic hydrocarbon group having 3-20 carbon atoms, an alkenyl group having 2-20 carbon atoms, a substituted or unsubstituted monovalent aromatic hydrocarbon group having 6-20 carbon atoms, a substituted or unsubstituted monovalent heterocyclic group having 3-20 atoms, or a group $-N(R^{2'})_2$, wherein $R^{2'}$ individually represents a hydrogen atom, a substituted or unsubstituted alkyl group having 1-20 carbon atoms, a substituted or unsubstituted monovalent alicyclic hydrocarbon group having 3-20 carbon atoms, an alkenyl group having 2-20 carbon atoms, a substituted or unsubstituted monovalent aromatic hydrocarbon group having 6-20 carbon atoms, or a substituted or unsubstituted,

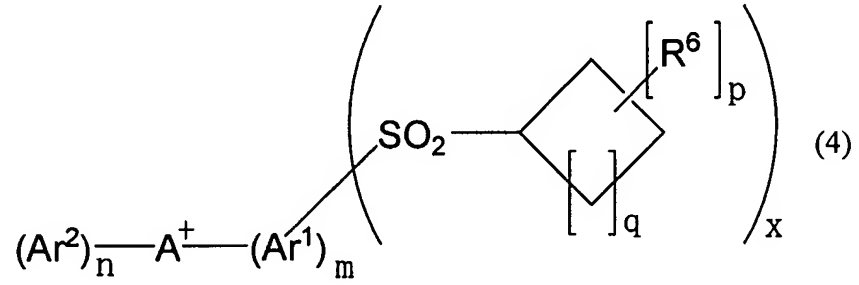
monovalent heterocyclic group having 3-20 atoms, or two $R^{2'}$ groups form, in combination and together with the nitrogen atom in the formula, a group having a cyclic structure with 3-8 atoms, p is an integer of 0-16, q is an integer of 0-8, and r is an integer of 1-3.

6. (Original) An onium salt compound according to claim 5, wherein both p and q are 0 and both r's are 1

7. (Currently Amended) [[The]] An onium salt compound ~~according to claim 1, wherein the group P in the formula (1) is represented by the following formula,~~



~~and the~~ having a cationic moiety [[is]] represented by the following formula (4)

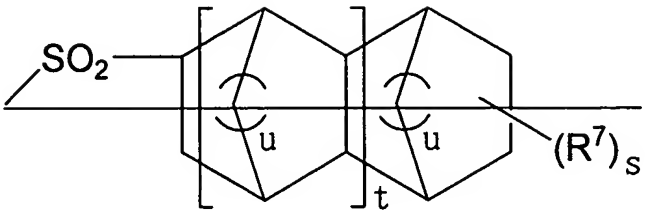


(4)

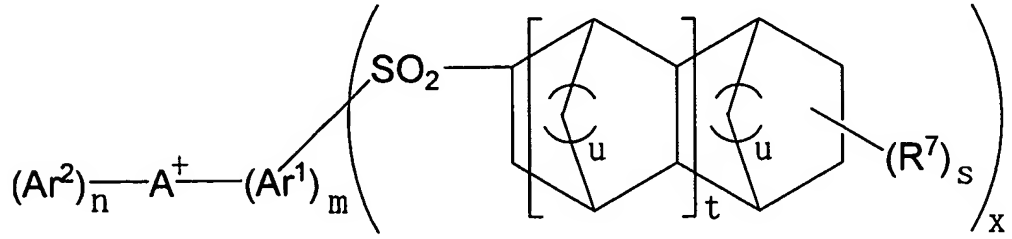
wherein ~~A, Ar^1, m, Ar^2, n, and x are respectively the same as A, Ar^1, m, Ar^2, n, and x in the formula (1), p and q are respectively the same as p and q in the formula (3)~~, A represents an iodine atom or a sulfur atom, when A is an iodine atom, m is 1 or 2 and n is 0 or 1, provided that (m+n)=2, and x is an integer of 1-10, and when A is a sulfur atom,

m is 1-3 and n is 0-2, provided that (m+n) = 3, and x is an integer of 1-15; Ar^1 represents a substituted or unsubstituted aromatic hydrocarbon group having 6-20 carbon atoms with a valence of 1 to (x+1) or a substituted or unsubstituted heterocyclic group having 3-20 atoms with a valence of 1 to (x+1), Ar^2 represents a substituted or unsubstituted monovalent aromatic hydrocarbon group having 6-20 carbon atoms or a substituted or unsubstituted monovalent heterocyclic group having 3-20 atoms, or Ar^1 and Ar^2 mutually bond together with A^+ in the formula to form a group possessing a cyclic structure with 3-8 atoms; p is an integer of 0-16; q is an integer of 0-8; and R^6 represents a substituted or unsubstituted alkyl group having 1-20 carbon atoms, a substituted or unsubstituted monovalent alicyclic hydrocarbon group having 3-20 carbon atoms, an alkenyl group having 2-20 carbon atoms, a substituted or unsubstituted monovalent aromatic hydrocarbon group having 6-20 carbon atoms, or a substituted or unsubstituted monovalent heterocyclic group having 3-20 atoms, or a group $-N(R^{3'})_2$, wherein $R^{3'}$ individually represents a hydrogen atom, a substituted or unsubstituted alkyl group having 1-20 carbon atoms, a substituted or unsubstituted monovalent alicyclic hydrocarbon group having 3-20 carbon atoms, an alkenyl group having 2-20 carbon atoms, a substituted or unsubstituted monovalent aromatic hydrocarbon group having 6-20 carbon atoms, or a substituted or unsubstituted, monovalent heterocyclic group having 3-20 atoms, or two $R^{3'}$ groups form, in combination and together with the nitrogen atom in the formula, a group having a cyclic structure with 3-8 atoms.

8. (Currently Amended) [[The]] An onium salt compound ~~according to claim 1, wherein the group P in the formula (1) is represented by the following formula,~~



~~and the~~ having a cationic moiety [[is]] represented by the following formula (5),

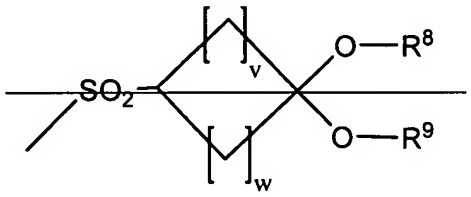


(5)

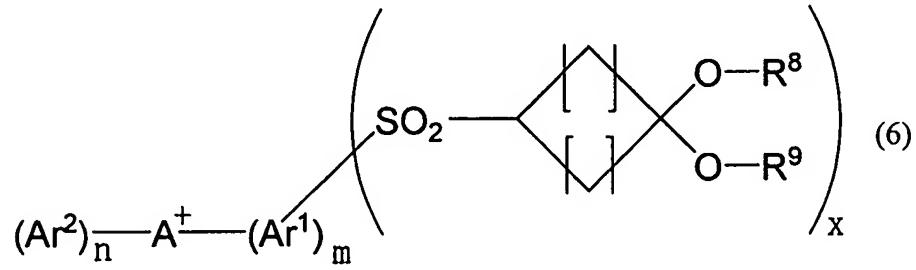
wherein ~~A, Ar^1, m, Ar^2, n, and x are respectively the same as A, Ar^1, m, Ar^2, n, and x defined in the formula (1)~~, A represents an iodine atom or a sulfur atom, when A is an iodine atom, m is 1 or 2 and n is 0 or 1, provided that (m+n)=2, and x is an integer of 1-10, and when A is a sulfur atom, m is 1-3 and n is 0-2, provided that (m+n) = 3, and x is an integer of 1-15; Ar^1 represents a substituted or unsubstituted aromatic hydrocarbon group having 6-20 carbon atoms with a valence of 1 to (x+1) or a substituted or unsubstituted heterocyclic group having 3-20 atoms with a valence of 1 to (x+1), Ar^2 represents a substituted or unsubstituted monovalent aromatic hydrocarbon group having 6-20 carbon atoms or a substituted or unsubstituted monovalent heterocyclic group having 3-20 atoms, or Ar^1 and Ar^2 mutually bond together with A^+ in the formula to form a group possessing a cyclic structure with 3-8 atoms, or Ar^1 and Ar^2 mutually bond together with A^+ in the formula to form a group possessing a cyclic structure with 3-8 atoms; R^7 represents a substituted or unsubstituted alkyl group having 1-20 carbon atoms, a substituted or unsubstituted monovalent alicyclic hydrocarbon group having 3-20

carbon atoms, an alkenyl group having 2-20 carbon atoms, a substituted or unsubstituted monovalent aromatic hydrocarbon group having 6-20 carbon atoms, or a substituted or unsubstituted monovalent heterocyclic group having 3-20 atoms, or a group -N $(R^{4'})_2$, wherein $R^{4'}$ individually represents a hydrogen atom, a substituted or unsubstituted alkyl group having 1-20 carbon atoms, a substituted or unsubstituted monovalent alicyclic hydrocarbon group having 3-20 carbon atoms, an alkenyl group having 2-20 carbon atoms, a substituted or unsubstituted monovalent aromatic hydrocarbon group having 6-20 carbon atoms, or a substituted or unsubstituted, monovalent heterocyclic group having 3-20 atoms, or two $R^{4'}$ groups form, in combination and together with the nitrogen atom in the formula, a group having a cyclic structure with 3-8 atoms, s is an integer of 0-6, t is an integer of 0-5, and u is an integer of 1-3.

9. (Currently Amended) [[The]] An onium salt compound ~~according to claim 1, wherein the group P in the formula (1) is represented by the following formula,~~



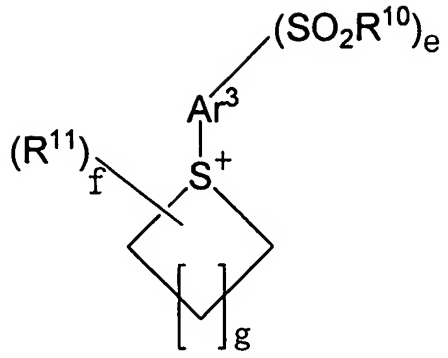
~~and the~~ having a cationic moiety [[is]] represented by the following formula (6) ,



(6)

wherein ~~A, Ar^1, m, Ar^2, n, and x are respectively the same as A, Ar^1, m, Ar^2, n, and x defined in the formula (1),~~ A represents an iodine atom or a sulfur atom, when A is an iodine atom, m is 1 or 2 and n is 0 or 1, provided that (m+n)=2, and x is an integer of 1-10, and when A is a sulfur atom, m is 1-3 and n is 0-2, provided that (m+n) = 3, and x is an integer of 1-15; Ar^1 represents a substituted or unsubstituted aromatic hydrocarbon group having 6-20 carbon atoms with a valence of 1 to (x+1) or a substituted or unsubstituted heterocyclic group having 3-20 atoms with a valence of 1 to (x+1), Ar^2 represents a substituted or unsubstituted monovalent aromatic hydrocarbon group having 6-20 carbon atoms or a substituted or unsubstituted monovalent heterocyclic group having 3-20 atoms, or Ar^1 and Ar^2 mutually bond together with A^+ in the formula to form a group possessing a cyclic structure with 3-8 atoms, or Ar^1 and Ar^2 mutually bond together with A^+ in the formula to form a group possessing a cyclic structure with 3-8 atoms; R^8 and R^9 individually represent a substituted or unsubstituted alkyl group having 1-20 carbon atoms or a substituted or unsubstituted monovalent alicyclic group having 3-20 carbon atoms, or R^8 and R^9 may form, in combination and together with one carbon atom and two oxygen atoms in the formula, a group having a cyclic structure with 4-10 atoms; and v and w are respectively the integers of 0-5, satisfying the formula $(v+w)\geq 1$.

10. (Withdrawn) An onium salt compound having a cation moiety of the following formula (7),

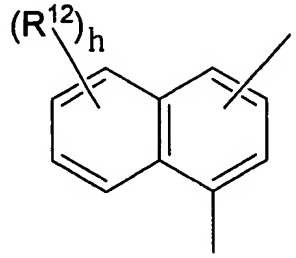


(7)

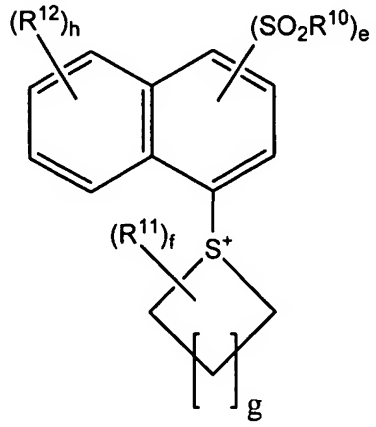
wherein Ar^3 represents a substituted or unsubstituted divalent aromatic hydrocarbon group having 6-20 carbon atoms or a substituted or unsubstituted divalent heterocyclic group having 3-20 atoms, R^{10} and R^{11} individually represent a substituted or unsubstituted alkyl group having 1-20 carbon atoms, a substituted or unsubstituted monovalent alicyclic hydrocarbon group having 3-20 carbon atoms, an alkenyl group having 2-20 carbon atoms, a substituted or unsubstituted monovalent aromatic hydrocarbon group having 6-20 carbon atoms, or a substituted or unsubstituted monovalent heterocyclic group having 3-20 atoms, or a group $-N(R^{5'})_2$ wherein $R^{5'}$ individually represents a hydrogen atom, a substituted or unsubstituted alkyl group having 1-20 carbon atoms, a substituted or unsubstituted monovalent alicyclic hydrocarbon group having 3-20 carbon atoms, an alkenyl group having 2-20 carbon atoms, a substituted or unsubstituted monovalent aromatic hydrocarbon group having 6-20 carbon atoms, or a substituted or unsubstituted, monovalent heterocyclic group having 3-20 atoms, or two $R^{5'}$ groups form, in combination and together with the nitrogen atom in the formula, a group having a cyclic structure with 3-8 atoms, e is an integer of 1-10, f is an integer of 0-6, and g is an integer of 0-3.

11. (Withdrawn) The onium salt compound according to claim 10, wherein the

group Ar^3 in the formula (7) is represented by the following formula,



and the cationic moiety is represented by the following formula (8) ,

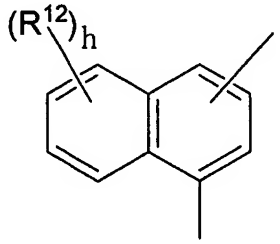


(8)

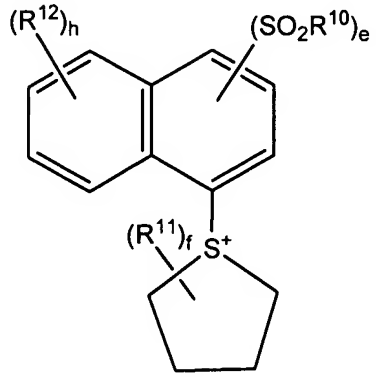
wherein R^{10}, e, R^{11}, f, and g are respectively the same as R^{10}, e, R^{11}, f, and g defined for the above formula (7), R^{12} represents a substituted or unsubstituted alkyl group having 1-20 carbon atoms, a substituted or unsubstituted monovalent alicyclic hydrocarbon group having 3-20 carbon atoms, an alkenyl group having 2-20 carbon atoms, a substituted or unsubstituted monovalent aromatic hydrocarbon group having 6-20 carbon atoms, or a substituted or unsubstituted monovalent heterocyclic group having 3-20 atoms, or a group $-N(R^{6'})_2$, wherein $R^{6'}$ individually represents a hydrogen atom, a substituted or unsubstituted alkyl group having 1-20 carbon atoms, a substituted or unsubstituted monovalent alicyclic hydrocarbon group having 3-20 carbon atoms, an alkenyl group having 2-20 carbon atoms, a substituted or unsubstituted monovalent aromatic

hydrocarbon group having 6-20 carbon atoms, or a substituted or unsubstituted, monovalent heterocyclic group having 3-20 atoms, or two $R^{6'}$ groups form, in combination and together with the nitrogen atom in the formula, a group having a cyclic structure with 3-8 atoms, and h is an integer of 0-6.

12. (Withdrawn) The onium salt compound according to claim 10, wherein the group Ar^3 in the formula (7) is represented by the following formula,



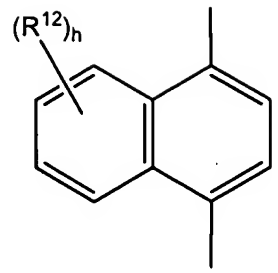
and the cationic moiety is represented by the following formula (9)



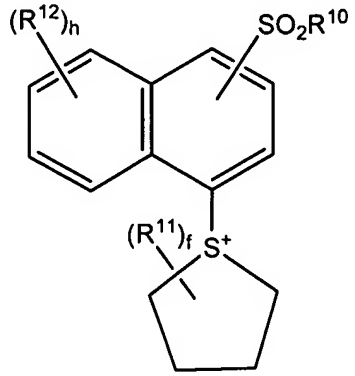
(9)

wherein R^{10}, e, R^{11}, f, R^{12} and h are the same as R^{10}, e, R^{11}, f, R^{12} and h defined for the above formula (8).

13. (Withdrawn) The onium salt compound according to claim 10, wherein the group Ar^3 in the formula (7) is represented by the following formula,



e=l, and the cationic moiety is represented by the following formula (10),

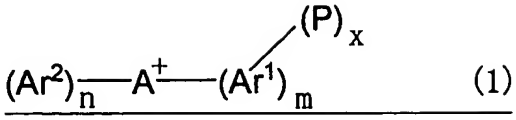


(10)

wherein R^{10}, R^{11}, f, R^{12} and h are the same respectively as R^{10}, R^{11}, f, R^{12} and h defined for the above formula (8).

14. (Currently Amended) A positive tone radiation-sensitive resin composition comprising:

(A) at least one ~~photoacid generator selected from the onium salt compounds according to claim 1 as a photoacid generator for photoresist~~ onium salt compound having a cation moiety of the following formula (1),



(1)

wherein A represents an iodine atom or a sulfur atom, when A is an iodine atom, m is 1 or 2 and n is 0 or 1, provided that (m+n)=2, and x is an integer of 1-10, and when A is a sulfur atom, m is 1-3 and n is 0-2, provided that (m+n) = 3, and x is an integer of 1-15; Ar^1 represents a substituted or unsubstituted aromatic hydrocarbon group having 6-20 carbon atoms with a valence of 1 to (x+1) or a substituted or unsubstituted heterocyclic group having 3-20 atoms with a valence of 1 to (x+1), Ar^2 represents a substituted or unsubstituted monovalent aromatic hydrocarbon group having 6-20 carbon atoms or a substituted or unsubstituted monovalent heterocyclic group having 3-20 atoms, or Ar^1 and Ar^2 mutually bond together with A^+ in the formula to form a group possessing a cyclic structure with 3-8 atoms; and the x-number of P groups bonding to one or more of the m-number of Ar^1 groups individually represent $-O-SO_2R^1$, $-O-S(O)R^2$, or $-SO_2R^3$, wherein R^1, R^2, and R^3 individually represent a hydrogen atom, a substituted or unsubstituted alkyl group having 1-20 carbon atoms, a substituted or unsubstituted monovalent alicyclic hydrocarbon group having 3-20 carbon atoms, an alkenyl group having 2-20 carbon atoms, a substituted or unsubstituted monovalent aromatic hydrocarbon group having 6-20 carbon atoms, or a substituted or unsubstituted monovalent heterocyclic group having 3-20 atoms, or a group $-N(R')_2$, wherein R' individually represents a hydrogen atom, a substituted or unsubstituted alkyl group having 1-20 carbon atoms, a substituted or unsubstituted monovalent alicyclic hydrocarbon group having 3-20 carbon atoms, an alkenyl group having 2-20 carbon

atoms, a substituted or unsubstituted monovalent aromatic hydrocarbon group having 6-20 carbon atoms, or a substituted or unsubstituted monovalent heterocyclic group having 3-20 atoms, or two R' groups form, in combination and together with the nitrogen atom in the formula, a group having a cyclic structure with 3-8 atoms; and

(B) a resin having an acid-dissociable group and which is insoluble or scarcely soluble in alkali, but which becomes alkali soluble when the acid-dissociable group dissociates.

15. (Original) The positive tone radiation-sensitive resin composition according to claim 14, wherein the onium salt compound is selected from the onium salt compounds having $-SO_2R^3$ for the group P in the formula (1).

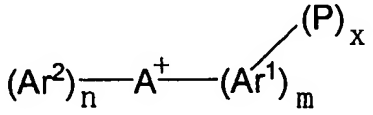
16. (Currently Amended) [[The]] A positive tone radiation-sensitive resin composition ~~according to claim 14, wherein the photoacid generator is selected from the onium salt compound according to claim 3~~ comprising (A) at least one onium salt compound according to Claim 3 as a photoacid generator; and (B) a resin having an acid-dissociable group and which is insoluble or scarcely soluble in alkali, but becomes alkali soluble when the acid-dissociable group dissociates.

17. (Currently Amended) [[The]] A positive tone radiation-sensitive resin composition ~~according to claim 14, wherein the photoacid generator is at least one onium salt compound according to claim 5~~ comprising: (A) at least one onium salt compound according to Claim 5 as a photoacid generator; and (B) a resin having an acid-dissociable

group and which is insoluble or scarcely soluble in alkali, but becomes alkali soluble when the acid-dissociable group dissociates.

18. (Withdrawn) A positive tone radiation-sensitive resin composition comprising: (A) at least one photoacid generator selected from the onium salt compounds according to claim 10 as a photoacid generator for photoresist and (B) a resin having an acid-dissociable group and insoluble or scarcely soluble in alkali, but becomes alkali soluble when the acid-dissociable group dissociates.

19. (New) An onium salt compound having a cation moiety of the following formula (1),

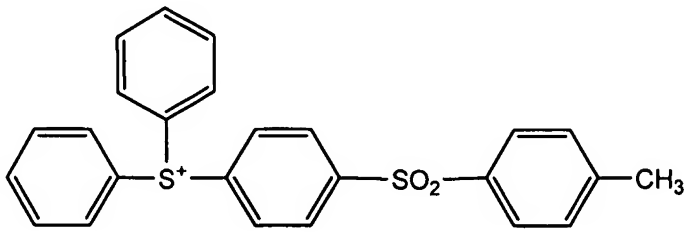


(1)

wherein A represents an iodine atom or a sulfur atom, when A is an iodine atom, m is 1 or 2 and n is 0 or 1, provided that (m+n)=2, and x is an integer of 1-10, and when A is a sulfur atom, m is 2 or 3 and n is 0 or 1, provided that (m+n) = 3, and x is an integer of 1-15; Ar^1 represents a substituted or unsubstituted aromatic hydrocarbon group having 6-20 carbon atoms with a valence of 1 to (x+1) or a substituted or unsubstituted heterocyclic group having 3-20 atoms with a valence of 1 to (x+1), Ar^2 represents a substituted or unsubstituted monovalent aromatic hydrocarbon group having 6-20 carbon atoms or a substituted or unsubstituted monovalent heterocyclic group having 3-20 atoms, or Ar^1 and Ar^2 mutually bond together with A^+ in the formula to form a group possessing a cyclic structure with 3-8 atoms; and the x-number of P groups bonding to the m-number

of Ar^1 groups individually represent $-O-SO_2R^1$, $-O-S(O)R^2$, or $-SO_2R^3$, wherein R^1, R^2, and R^3 individually represent a hydrogen atom, a substituted or unsubstituted alkyl group having 1-20 carbon atoms, a substituted or unsubstituted monovalent alicyclic hydrocarbon group having 3-20 carbon atoms, an alkenyl group having 2-20 carbon atoms, a substituted or unsubstituted monovalent aromatic hydrocarbon group having 6-20 carbon atoms, or a substituted or unsubstituted monovalent heterocyclic group having 3-20 atoms, or a group $-N(R')_2$, wherein R' individually represents a hydrogen atom, a substituted or unsubstituted alkyl group having 1-20 carbon atoms, a substituted or unsubstituted monovalent alicyclic hydrocarbon group having 3-20 carbon atoms, an alkenyl group having 2-20 carbon atoms, a substituted or unsubstituted monovalent aromatic hydrocarbon group having 6-20 carbon atoms, or a substituted or unsubstituted monovalent heterocyclic group having 3-20 atoms, or two R' groups form, in combination and together with the nitrogen atom in the formula, a group having a cyclic structure with 3-8 atoms.

20. (New) An onium salt compound having a cation moiety selected from the group consisting of:



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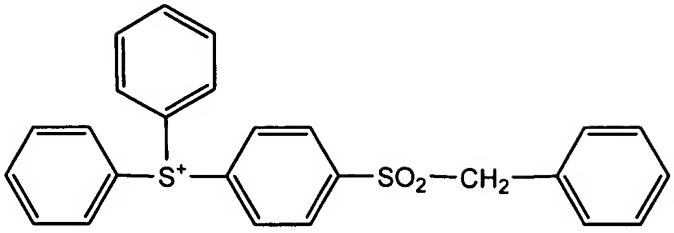
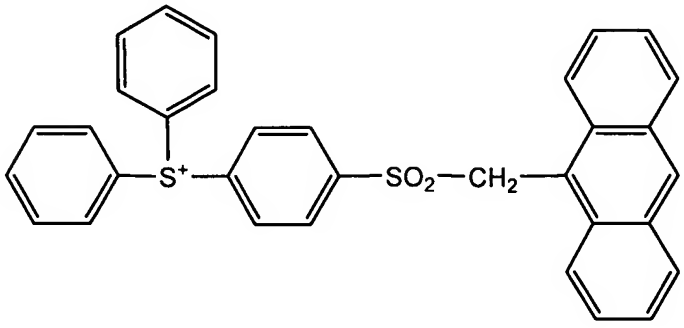


; and



21. (New) A positive tone radiation-sensitive resin composition comprising: (A) at least one onium salt compound according to Claim 20 as a photoacid generator; and (B) a resin having an acid-dissociable group and which is insoluble or scarcely soluble in alkali, but becomes alkali soluble when the acid-dissociable group dissociates.